

80287

Page 1

N900040100

Setup Start *NS1*

Stop *NS2*

*** 1 ***

Cust Item ID:

*** 1 ***

Customer:

Reference:

Date: 12/02/16 Tooling:

Date:

Run Start *NR1*

Date:

SPC (Y/N):

Date:

Stop *NR2*

Draw Nbr	Revision Nbr
D3391	I

0.00

100

MORI SEIKI CNC LATHE LARGE

0.00

Mori Seiki

Memo

Mori Seiki CNC Lathe Large

Turn as per Folio FA599 Rev: ~~AA~~ & Dwg D3391 Rev: 1

scribe batch # on fwd end at 90 degree

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Memo

0.00

Quality Control

111

QC8- Inspect parts - second check

0,00

111

QC

Memo

0.00

Quality Control

INSPECT INSIDE BORE

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 80287

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February-16-12 10:27:48 AM

Item ID: D3391-025

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Aft Tube Assembly

Start Date: 16/02/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 01/03/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

0.00

120

HAAS CNC VERTICAL MACHINING #1

0.00

HAAS 1

Memo

HAAS CNC vertical machine #1

1-Machine as per Folio FA 599 Rev: 4A & Dwg D3391 Rev: I
2-Deburr

mk 12/03/05

130

0.00

130

QC2- Inspect parts off machine FAI/FAIB

0.00

QC

Memo

Quality Control

mk 12/03/05

140

0.00

140

QC8- Inspect parts - second check

0.00

QC

Memo

Quality Control

INSPECT INSIDE BORE

B.A 12/03/07

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 80287

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Item ID: D3391-025

Accept

N9000040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Aft Tube Assembly

Start Date: 16/02/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 01/03/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

150

0.00

150

Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1-Drill (PILOT HOLE) aft cap holes per Dwg D3391 using DT8803

- pc 12/03/07

160

0.00

160

BENDING MACHINE - SKIDTUBES

CNC Bend 1

Memo

0.00

CNC Delta 100 Bender

Form as per Dwg D3391 Using Bend Prog 3391025

pc 12/03/07

170

QC5- Inspect part completeness to step on W/O

0.00

170

QC

Memo

0.00

Quality Control

4.32"

DP 12-3-7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

Work Order ID 80287

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Item ID: D3391-025

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Aft Tube Assembly

Start Date: 16/02/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 01/03/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

180

0.00

180

Skidtubes

0.00

Skidtubes

Memo

1-Open Aft cap pilot hole to .208" as per Dwg D3391

2-Drill float bag holes using DT8809 as per Dwg D3391 (Holes marked "A" Only.

3-Drill wearplate holes as per Dwg D3391 using DT8878 (Mid Tube) & DT8217 Wearplate Jig

*****Do Not Open To Finished Size*****

4-Drill Wearshoe holes as per DWG D3391 using DT8939 locating from 2 previously drilled aft wearplate holes.

5-Open wearplate holes to 0.250" and c'bore as per dwg D3391

6-Open up all wearshoe, wearplate to 0.297" and float bag holes to 0.328" as per Dwg D3391.

7-Deburr

OK 12/03/08

Pto →

OK 12/03/12

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3391-225 PAR #: _____ Fault Category: Landing gear/skid NCR: Yes No DQA: Int Date: 12/03/28
 Resolution: use on in Disposition: use as is QA: N/C Closed: CK Date: 12/3/28

NCR: <u>12-1288</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
12/3/12	15/0	counter sink too deep - meas 0.230" should be 0.170" deep. Detail CB1 5th wear R Plate hole from att. operate error when counter cut in hole.	CP 12.03.05 Q5/012	Acceptable based on attached SR	MC 12/03/15	G 12/03/15	CP 12.03.15 Q5/012	S 12/03/12

NOTE: Date & initial all entries

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N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 16/02/2012 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 01/03/2012 **Req'd Qty:** 1.00 *** 1 ***

Customer:

Reference:

Approvals: _____ **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

**Insp.
Stamp**

QC5- Inspect part completeness to step on W/O

0.00

Sinclair

190

0.00

QC

Memo

Quality Control

Chemical Conversion Coat per QSI005 4.1

0.00

200

0.00

HandFinish

Memo

Hand Finishing

QC3- Inspect Part Finish

0.00

210

0.00

QC

Memo

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 80287

80287

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February-16-12 10:27:48 AM

Item ID: D3391-025

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Aft Tube Assembly

Start Date: 16/02/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 01/03/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220	Skidtubes	0.00							
220									
Skidtubes	Memo	0.00							
Skidtubes	Instal spacers as per dwg D3391 A/R Magnabond 6398 Batch: <u>M120666</u> exp. date: <u>13-1-30</u> cure time 12hrs as per QSI0015								
230	QC5- Inspect part completeness to step on W/O	0.00							
230									
QC	Memo	0.00							
Quality Control									
235	Pressure Wash per QSI005 4.3	0.00							
235									
HandFinish	Memo	0.00							
Hand Finishing	AND REALODINE AS PER PAR09-043								

12-3-16

12-03-19

12-3-19

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 80287

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February-16-12 10:27:48 AM

Item ID: D3391-025 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Aft Tube Assembly
 Start Date: 16/02/2012 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 01/03/2012 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
240	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00				1	0	0	12/03/21
240									
Powdercoat	Memo	0.00							
Powder Coating	START TIME: 11h20 OVEN TEMPERATURE: 320°F FINISH TIME: 11h50	11/20 222							
250	QC3- Inspect Part Finish	0.00				1	0	0	12/03/23
250									
QC	Memo	0.00							
Quality Control									
260	HandFinishing	0.00				1	0	0	12/03/23
260									
HandFinish	Memo	0.00							
Hand Finishing	1-Install inserts as per Dwg D3391 2-Install Aft Cap as per Dwg D3391 A/ R Sikaflex-241/-291 11/9999 Sikaflex expiry date: 12/06 3- INSTALL WEARPLATES AS PER DWG								

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 80287

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Page 8

Item ID: D3391-025 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Aft Tube Assembly
 Start Date: 16/02/2012 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 01/03/2012 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

270	QC5- Inspect part completeness to step on W/O	0.00							
270		0.00							
QC	Memo								
Quality Control									

280	Identify as per dwg & Stock Location: <u>W/O</u>	0.00							
280		0.00							
Packaging	Memo								
Packaging									

290	QC21- Final Inspection - Work Order Release	0.00							
290		0.00							
QC	Memo								
Quality Control									

MLJ 12/03/26

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 1

Work Order ID: 80287

80287

Parent Item: D3391-025

D3391-025

Parent Item Name: Aft Tube Assembly

Start Date: 16/02/2012

Required Date: 01/03/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev B 06-02-07 ECN773 dwg rev. D EC
 IPP Rev:C 06-03-28 Update Manuf. Instructions JLM
 IPP rev D 07.03.20 revF dwg EC
 IPP rev E 07.11.07 rev G dwg ecn 1053p EC verified by: DD
 IPP Rev:F 07-11-13 ECN 1056 DD verified by: EC
 IPP Rev:G 08-09-10 revH as per dwg DD verified by:EC IPP Rev:H
 11.11.14 AS PER REV.I DD verified by:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D4095-047		Manufactured	No			260	Each	16.0000	1	1			
D4095-047										**	1380703 (x1) MU 12/03/23		
Wearpad Assembly													

Location	Loc Qty	Loc Code
FP001	4	
77435	4	
FP002	12	
78325	12	

D4095-049		Manufactured	No			260	Each	11.0000	1	1			
D4095-049										**	1380704 (x1) MU 12/03/23		
Wearpad Assembly													

Location	Loc Qty	Loc Code
FP002	11	
76538	4	
77436	7	

D6014-090		Manufactured	No			100	Each	0.0000	1	1			
D6014-090										**	11332 x1 EG 12/03/12		
ALUMINUM EXTRUSION													

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 80287

Parent Item: D3391-025

Parent Item Name: Aft Tube Assembly

80287

D3391-025

Start Date: 16/02/2012

Required Date: 01/03/2012

Start Qty: 1.00

Required Qty: 1.00

D3670-4-200

Manufactured No

230

Each

99.0000

4

4

D3670-4-200

SPACER

**

12-3-16

Location

Loc Qty

Loc Code

LG001

80360

99

72851

7

77500

32

78606

60

4

D2646

Manufactured No

270

Each

106.0000

1

1

D2646

Aft Cap

**

379500(x1) 11/03/12

Location

Loc Qty

Loc Code

FP002

106

62678

5

68280

5

70945

1

71070

2

73294

1

73825

42

78018

50

D3672-1

Manufactured No

270

Each

924.0000

2

2

D3672-1

Phenolic Washer

**

12/03/12

Location

Loc Qty

Loc Code

FP001

288

66821

288

ST060

636

72229

136

76277

500

X2

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Picklist Print

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Work Order ID: 80287

80287

Parent Item: D3391-025

D3391-025

Parent Item Name: Aft Tube Assembly

Start Date: 16/02/2012

Required Date: 01/03/2012

Start Qty: 1.00

Required Qty: 1.00

ALS4-1032-130

Purchased

No

260

Each

2,115.000

14

14

AI S4-1032-130 ✖ Aft S7-1032-130 ✖
Insert

**

M120181 (x14) ul 12103128

Location

Loc Qty

Loc Code

ST280

1116

119084

116

120671

1000

ST281

999

119632

19

120410

980

ALS4-1032-225

Purchased

No

270

Each

1,382.000

8

8

AI S4-1032-225
Insert

**

M120671 (x8) ul 12103123

Location

Loc Qty

Loc Code

ST281

1031

108696

146

110768

62

118386

55

118966

68

120671

700

ST282

351

120410

200

120451

151

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Picklist Print

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Work Order ID: 80287

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Parent Item: D3391-025

D3391-025

Parent Item Name: Aft Tube Assembly

Start Date: 16/02/2012

Required Date: 01/03/2012

Start Qty: 1.00

Required Qty: 1.00

AN3C4A Purchased No

270 Each 3,439.000 6 6

AN3C4A
BOLT

** M 120769 (yb)

Location	Loc Qty	Loc Code
ST350	3439	
117313	2	
117688	5	
117872	10	
118112	16	
118451	2	
119749	10	
120187	2000	
120423	394	
120521	1000	

AN3C5A Purchased No

270 Each 1,038.000 4 4

AN3C5A
Bolt

** M 12103123

Location	Loc Qty	Loc Code
FP001	7	
115835	7	
ST350	1031	
116419	28	
117343	13	
117764	7	
117872	2	
119127	24	
119749	27	
120423	930	

AN960C10L NAS1149C0332 Purchased No

270 Each 0.0000 10 10

AN960C10I
washer

✱

** M 120648 (x10) M 12103127

February-16-12 10:27:53 AM

Shop Packet Print

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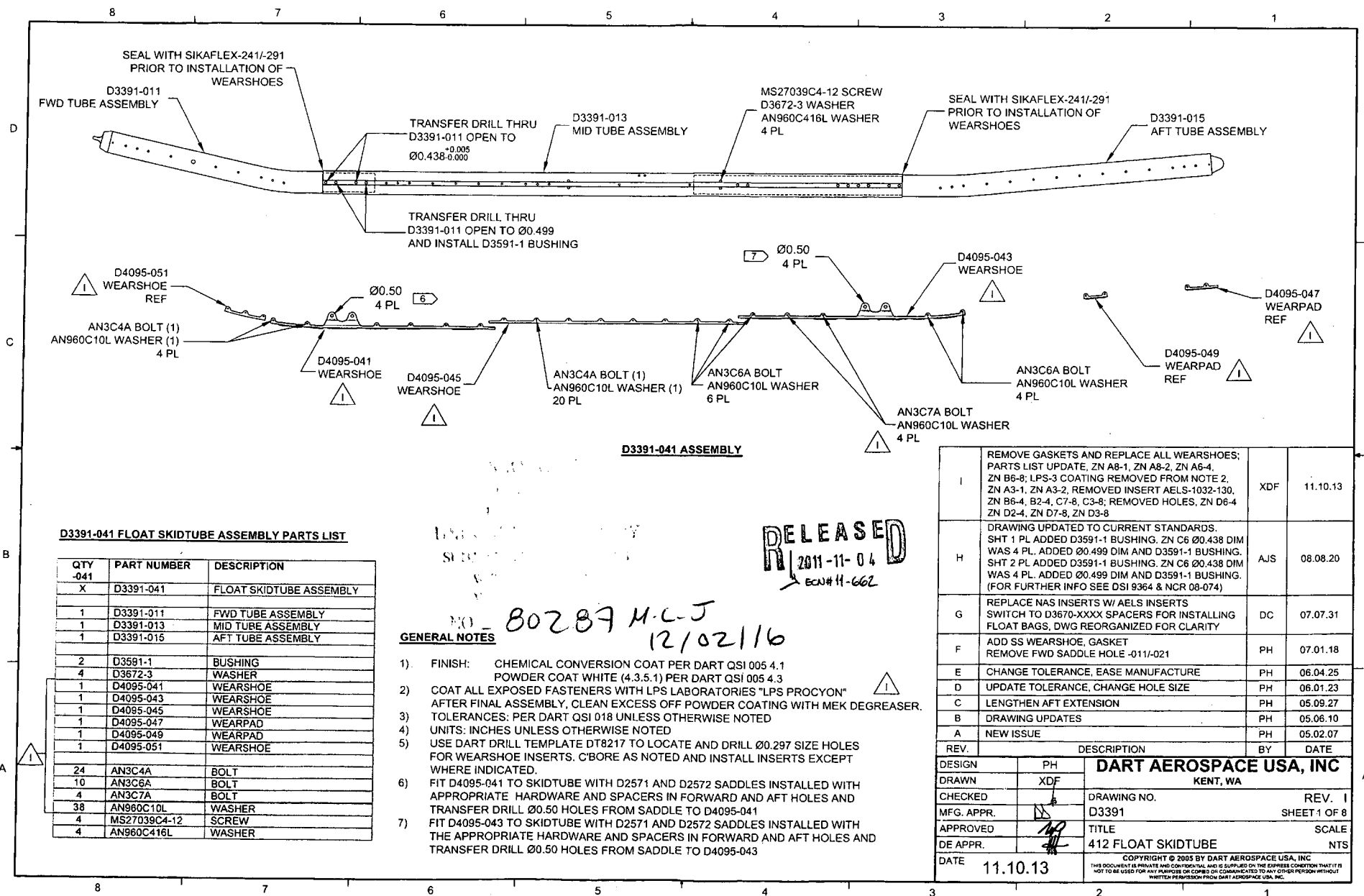
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

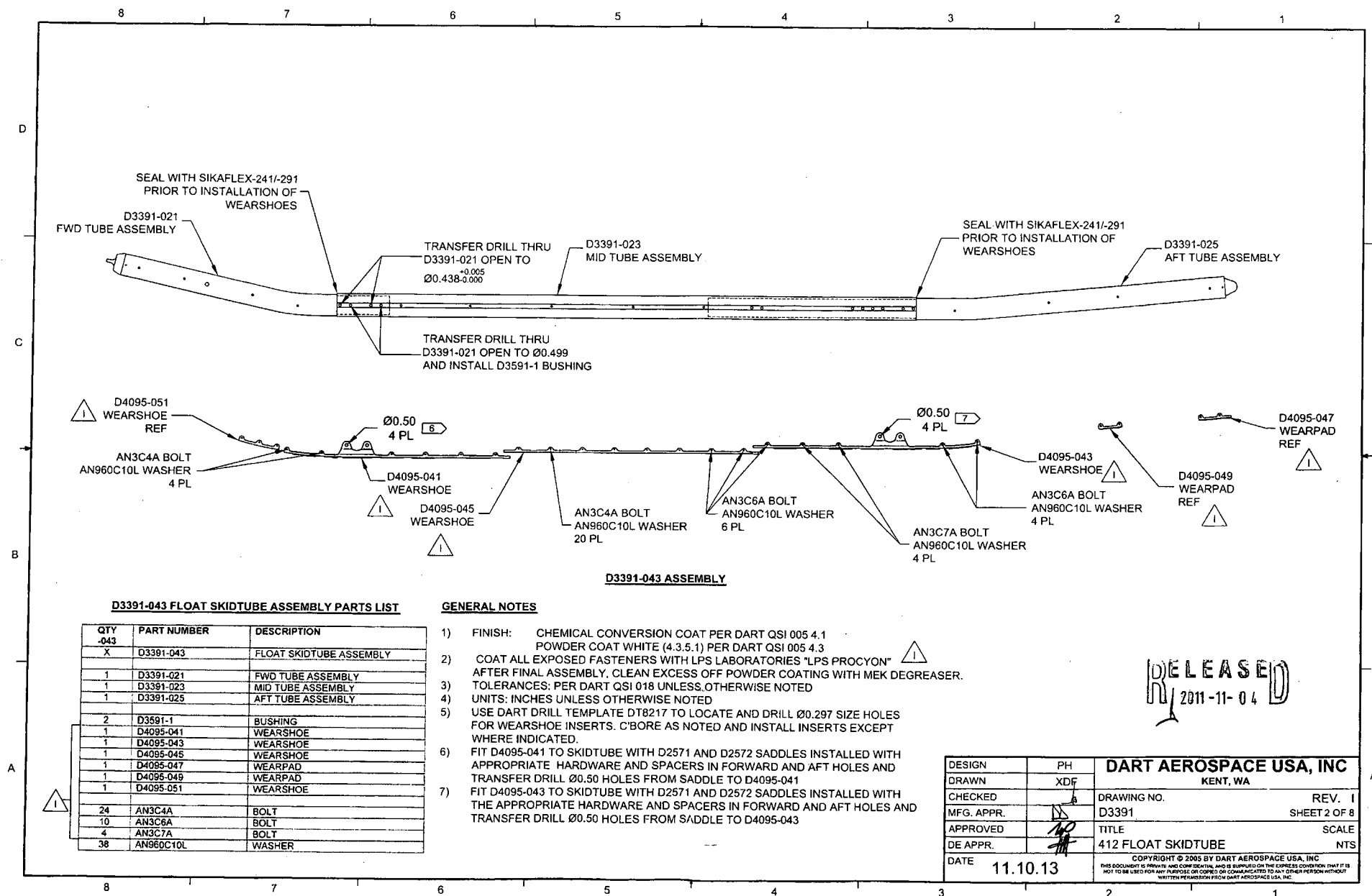
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

80287



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

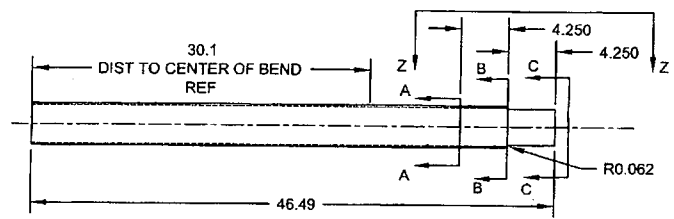
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

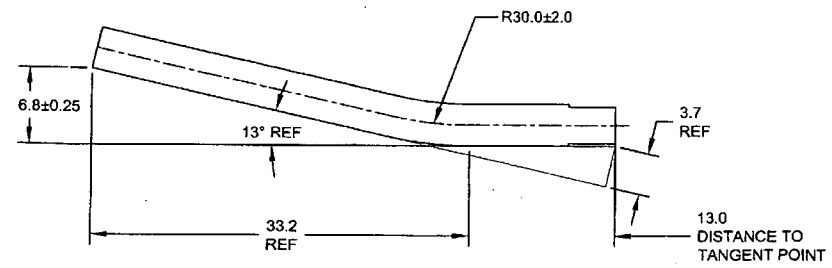
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

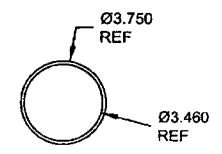
80287



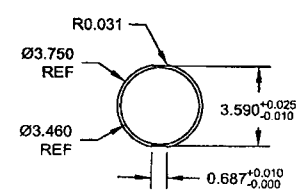
D3391-1 CUTTING DETAIL
(MAKE FROM D6013-047 SKIDTUBE MATERIAL)



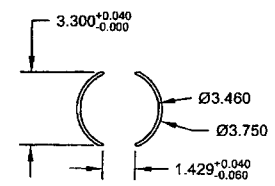
D3391-011/-021 BENDING DETAIL
(MAKE FROM D3391-1)



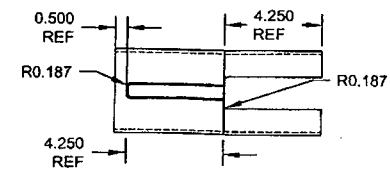
SECTION A-A
SCALE 2X



SECTION B-B
SCALE 2X



SECTION C-C
SCALE 2X



VIEW Z-Z
SCALE 2X

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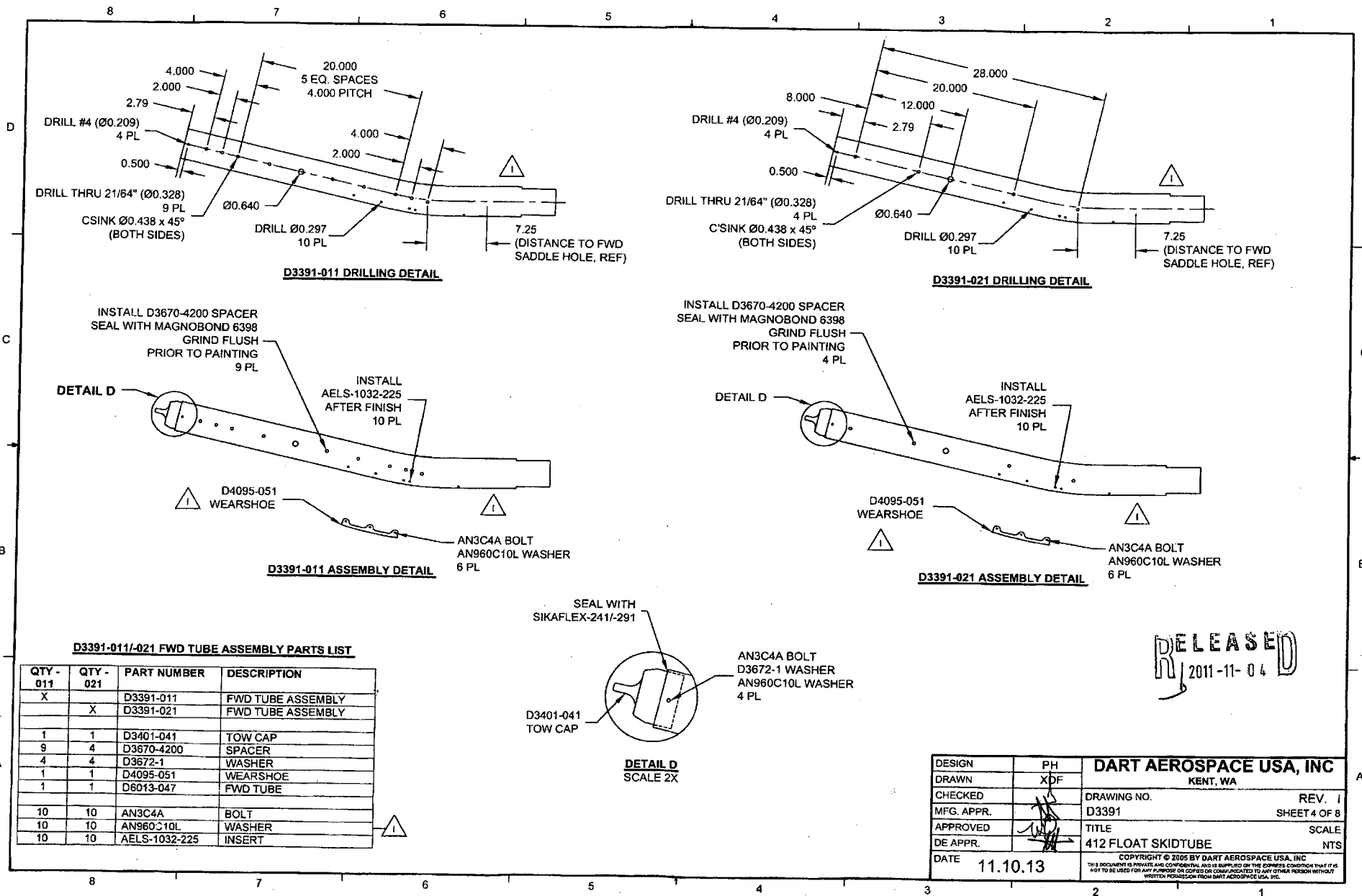
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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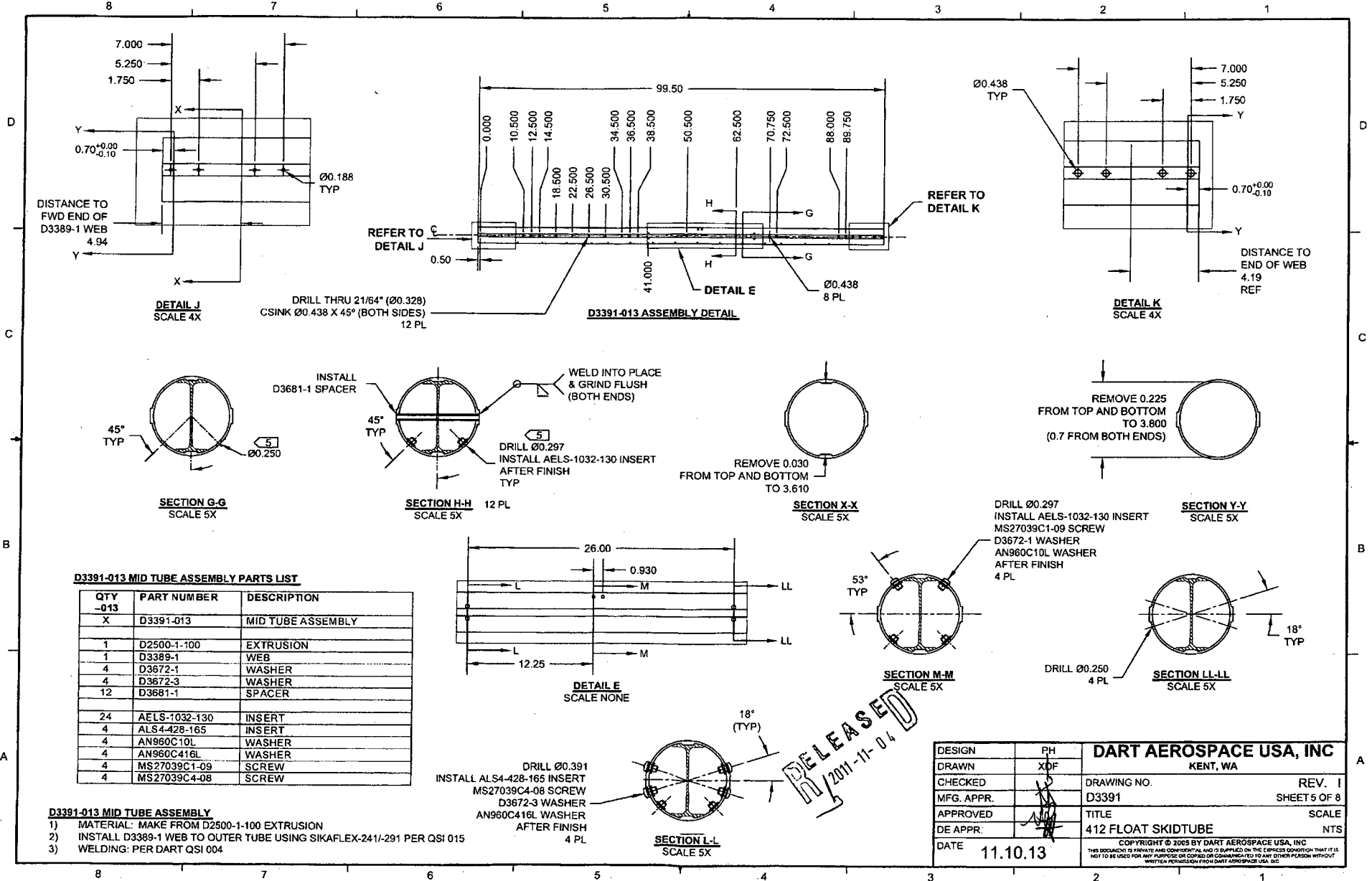
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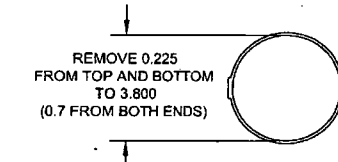
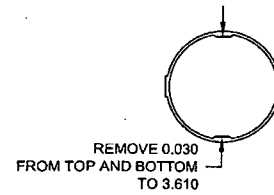
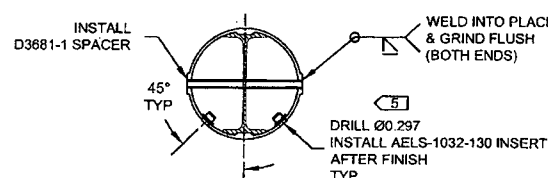
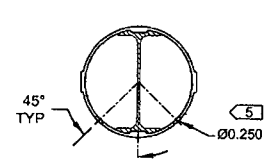
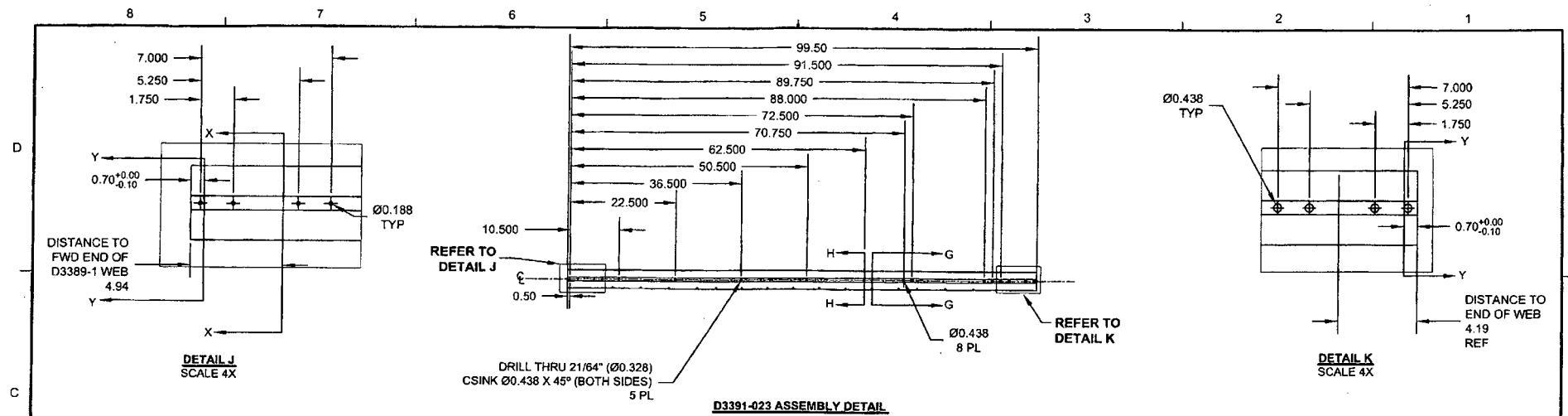
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NOTE: Date & initial all entries

80287



D3391-023 MID TUBE ASSEMBLY PARTS LIST

QTY -	PART NUMBER	DESCRIPTION
023		
X	D3391-023	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
5	D3681-1	SPACER
20	AELS-1032-130	INSERT

- D3391-023 MID TUBE ASSEMBLY**
- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
 - 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/291 PER QSI 015
 - 3) WELDING: PER DART QSI 004

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Dart Aerospace Ltd

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

D

VIEW BB-BB
SCALE 4X

1.526 REF
R0.188
0.200 REF

7.500
1.750
6.500

AA
BB
BB
N
P
Q
R

DETAIL S
36.435 TO TAPER
MACHINE CONSTANT TAPER FROM Ø3.750 TO Ø3.200
DIST TO CENTER OF BEND
43.3 REF

17.250
24.250
27.750
88.93

DETAIL V
0.400
CHAMFER 30°X0.060 DEEP
DRILL #4 (Ø0.209) 2 PL

D3391-3 AFT DRILLING AND CUTTING DETAIL
(MAKE FROM D6014-090 SKIDTUBE MATERIAL)

1.526^{+0.000}_{-0.030}
3.300
Ø3.500
Ø3.750 REF

SECTION AA-AA
SCALE 6X

0.200
3.300
Ø3.000 REF
Ø3.750 REF

SECTION N-N
SCALE 6X

0.687^{+0.010}_{-0.000}
3.520
Ø3.000 REF
Ø3.750 REF
R0.062

SECTION P-P
SCALE 6X

Ø3.000 REF
Ø3.750 REF

SECTION Q-Q
SCALE 6X

Ø3.000 REF
Ø3.750 REF

SECTION R-R
SCALE 6X

Ø3.000 REF
Ø3.200

W
1.750
1.750
Ø0.484 16 PL
1.750
5.250
7.000
R0.062

DETAIL S
SCALE 4X

0.500 REF
R0.188
0.013
R0.094

VIEW W-W
SCALE 4X

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8 7 6 5 4 3 2 1

A

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

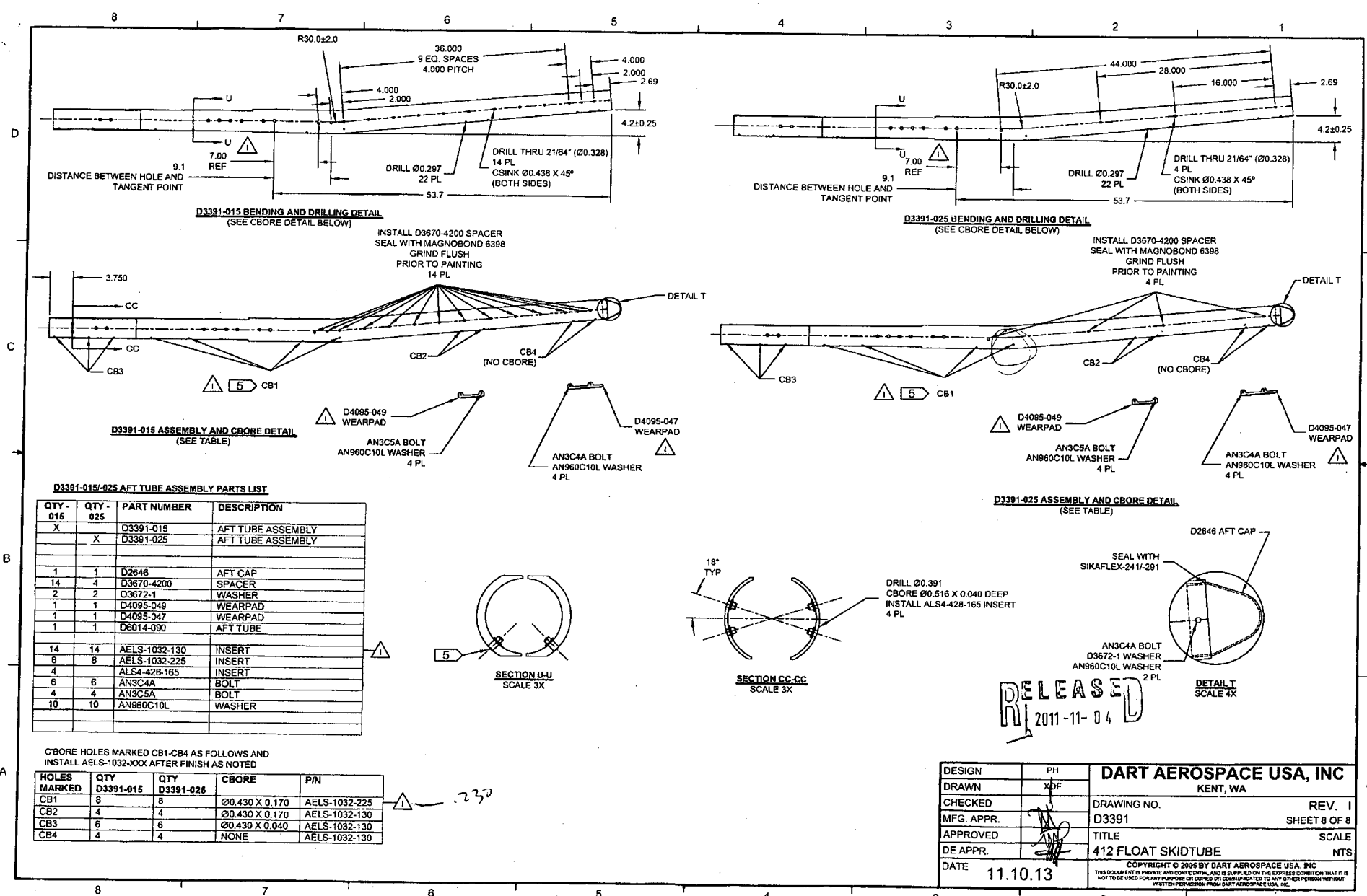
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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80287



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DART AEROSPACE LTD		Work Order:	80287
Description: Float Skidtube (412)		Part Number:	D3391-3
Inspection Dwg: D3391	Rev: H / I	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Lathe Section						
14.000	+/-0.010	14.002	—		Caliper	BC 06
3.500	+/-0.010	3.495	—			"
88.93	+/-0.030	88.93	—		Tape	BA 09
Ø3.200	+/-0.010	3.206				BA 06
88.93	+/-0.030	88.93	—		Tape	BA 09
Ø3.750	+/-0.010	3.746	—			BA 06
30° x 160° chamfer	+/-0.010	—	—			—

Measured by: B.A./JL	Date: 12/03/04
Audited by: [Signature]	Date: 12/03/05

HAAS Section						
1.526	+0.000/-0.030	1.570	—		Vernier 06	
7.500	+/-0.010	7.497	—		M-type 04	
27.750	+/-0.010	27.750	—		"	
31.750	+/-0.010	31.750	—		"	
35.250	+/-0.010	35.250	—		"	
3.300	+/-0.010	3.294	—		Vernier 06	
0.200	+/-0.010	.198	—			
3.520	+/-0.010	3.525	—			
0.687	+0.010/-0.000	.687	—			
R0.062	+/-0.010	R.062	—			
Ø0.484	+0.005/-0.001	Ø.489	—			

Measured by: [Signature]	Date: 12/03/05
Audited by: B.A.	Date: 12/03/07

Rev	Date	Change	Revised by	Approved
A	06.04.24	New Issue P/O D3391-015/-025	KJ/JLM	
B	06.06.19	Dwg revision update	KJ/JLM	
C	07.04.20	Ø0.208 dimension removed	KJ/JLM	
D	07.09.06	0.400 dimension removed	KJ/JLM	
E	07.11.23	Dwg Rev. updated	KJ/EC/DD	
F	09.04.27	Dimensions updated per Rev H and NCR09-028	KJ/JLM	
G	09.11.16	Dimension 0.200 removed	KJ	
H	11.06.21	Dimension 44.995 removed	KJ	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

Bending about Point A & B

$$A: F = \frac{mL}{I} = \frac{39.136 \times 3.75}{5.316 \times 2} = 10.50 \times P \quad 13.80 \times P$$

$$B: \quad " \quad = \frac{33.233 \times 3.72}{5.001 \times 2} = 12.36 \times P$$

$$MS = \frac{13.80}{12.36} - 1 = 0.11$$

Tube will fail at point A before point B, even with a $\phi 0.430 \times 0.230$ COUNTER BORE.
 $\therefore 0.230$ AC BORE IS ACCEPTABLE.
 DEEP

P 12.03.15

